Patent claims

1. A component, in particular a turbine blade or vane, which is intended to be partially coated and has a masking layer on parts of the component which are not to be coated,
characterized in that

the masking layer (25) reacts with material (22) of layers (19) which are to be applied to the component (1) and can readily be removed again on account of the reaction between this material (22) and material of the masking layer (25), and
in that the masking layer (25) forms a water-soluble layer with the material (22) of layers (19) which are to be applied to the component (1).

2. A component, in particular a turbine blade or vane, which is intended to be partially coated and has a masking layer on parts of the component which are not to be coated,
characterized in that

the masking layer (25) reacts with material (22) of layers (19) which are to be applied to the component (1) and can readily be removed again on account of the reaction between this material (22) and material of the masking layer (25), and
in that the masking layer (25) forms a ceramic layer or a precursor to a ceramic layer (43) with the material (22) of layers (19) which are to be applied to the component (1).

3. A component, in particular a turbine blade or vane, which is intended to be partially coated and has a masking layer on parts of the component which are not to be coated,
characterized in that

the masking layer (25) reacts with material (22) of layers (19) which are to be applied to the component (1) and can readily be removed again on account of the reaction between this material (22) and material of the masking layer (25), and
in that a first functional layer (28) is applied to a base material (40) of the component (1) as part of the masking layer (25), this functional layer allowing good bonding to the base material of the component (1),
in that a gradient layer (31) which allows dense and crack-free coating of the masking layer (25) is applied to the first functional layer (28), and
in that a reactive layer (34) is applied to the gradient layer (31).

4. The component as claimed in claim 1 or 3,
characterized in that

the masking layer (25) forms a ceramic layer or a precursor to a ceramic layer (43) with the material (22) of layers (19) which are to be applied to the component (1).

5. The component as claimed in claim 1 or 2, characterized in that

the masking layer (25) forms a water-soluble layer with the material (22) of layers (19) which are to be applied to the component (1).

6. The component as claimed in claim 1 or 2, characterized in that

a first functional layer (28), as part of the masking layer (25), is applied to a base material (40) of the component (1), this functional layer allowing good bonding to the base material of the component (1).

7. The component as claimed in claim 3 or 6, characterized in that

the first functional layer (28) consists of carbosilane.

8. The component as claimed in claim 6, characterized in that

a gradient layer (31) which allows dense and crack-free coating of the masking layer (25) is applied to the first functional layer (28).

9. The component as claimed in claim 3 or 8, characterized in that

the gradient layer (31) is a mixture of polysiloxane, metal and/or a metal-ceramic.

10. The component as claimed in claim 3, 8 or 9, in which a filler is added to the gradient layer (31) in order to prevent thermomechanical stresses in the masking layer (25) or between the masking layer (25) and a substrate (40) of the component (1) as a result of different coefficients of thermal expansion.

11. The component as claimed in claim 1, 2 or 3, characterized in that

the masking layer (25) at least in part contains carbon, in particular at its outer surface.

12. The component as claimed in claim 1, 2 or 3, characterized in that

the masking layer (25) is a gradient layer.